



REPORT
ON
THE SANITARY CONDITION
OF THE
CITY OF LONDON,
FOR THE YEAR 1848-9.

BY
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THE
SANITARY CONDITION
OF THE
CITY OF LONDON.

CITY COMMISSIONERS OF SEWERS.

MR. SIMON'S ANNUAL REPORT.

TO THE HON. THE COMMISSIONERS OF SEWERS OF
THE CITY OF LONDON.

Lancaster Place, Nov. 6, 1849.

GENTLEMEN,

DURING the 52 weeks dating from October 1st, 1848, to September 29th, 1849, there died of the population of the City of London 3,799 persons.

The rate of mortality, estimated from these *data* for a population of 125,500, would be some-

what in excess of 30 deaths out of every thousand living persons.

The lowest suburban mortality recorded in the fifth volume of the Registrar-General's Reports, for the year then under estimation, gave a rate of 11 in the thousand; and we might perhaps be justified in adopting that rate as a *minimum* for the purpose of sanitary comparison.

According to this standard (undoubtedly a very superior one) it would appear that, during the last year, death has prevailed in the City of London with nearly three times its recognised *minimum* of severity.

But, to avoid all sources of fallacy, I will allow a very ample margin to this admeasurement; I will take 15 per thousand as a fair standard, and will assume that the deaths in the City have amounted to only the double of their normal proportion.

Probably no one contends that the lower rate of mortality (as illustrated at Dulwich or Sydenham), indicates an over-healthy condition of the locality to which it refers. Probably no one argues that human life, in those healthier districts, is prolonged beyond enviable limits. Surely, on the contrary, every one who can measure the large amount of misery and destitution which results from a high rate of mortality, will think it most desirable that, by every means within the scope of sanitary science, exertion should be made to reduce the higher rate to the level of the lower.

Therefore, Gentlemen, I venture to assure myself, that, I shall but have anticipated the wishes of this Honourable Court, in preparing for your consideration a statement of those circumstances, which apparently conspire to determine the larger mortality of the City of London.

In order to prevent any misapprehension of my remarks, I think it well to observe that, in commenting on this mortality, I purposely avoid instituting any comparison between it and the mortality of those urban districts which immediately adjoin us: for the object of my comparison is not to illustrate how, by similar or worse circumstances, an equally great mortality may have been procured elsewhere; but rather to suggest how, by other and better sanitary arrangements here, our present high mortality may be diminished.

Also, while I speak of the causes of that high mortality which distinguishes the City of London from the healthier sub-districts I have cited, it will be obvious that many of my observations do not apply to the City of London exclusively, but admit of equal application to various other central districts of the metropolis;—relating, in fact, generally to the characteristic evils of all urban residences.

With those other districts I have nothing to do; but I wish it to be understood, that in describing the City as healthy or unhealthy, I am not com-

paring it with Holborn or Whitechapel, or Bermondsey, or other urban localities, where (whatever the relative badness of the places) the scale of comparison would be essentially vicious, and the results of comparison worthless. It is my object to test the salubrity of the City by comparison with a superior standard, in order that some definite aim may appear, towards which the endeavours of sanitary improvement shall be directed.

Starting, then, from the Registrars' Returns, I invite you to inquire with me, how it has come to pass that, within the City of London, there have died in the last year twice as many persons as it seems necessary that there should die; and whence has arisen the apparent anomaly, that here—in the very focus of civilization, where the resources of curative medicine are greatest, and all the appliances of charitable relief most effectual, still, notwithstanding these advantages, there has passed away irrevocably during the year so undue a proportion of human life.

Let it not be imagined that the word 'cholera' is a sufficient answer to these questions, or that its mention can supersede the necessity for sanitary investigation. Let it, on the contrary, be observed that the epidemic which has visited us, extends its ravages only to localities previously and otherwise hostile to life; so that while all regions of the globe in succession are shadowed by its dark transit, the

healthiest districts of each region remain utterly unharmed in presence of the pestilence. Compare, for instance, the cholera mortality in a healthy suburban sub-district with that of an unhealthy urban one. Dulwich and the parish of St. Ann's, Blackfriars, in the City of London, are probably nearly equal in population: in the former, there was not a single death from cholera; in the latter, the deaths from this cause alone were at the rate of twenty-five to every thousand of the population. Dulwich is one of the healthiest sub-districts within the bills of mortality; St. Ann's belongs to one of the unhealthiest sub-districts of the City of London; and the cholera visited each in proportion to its ordinary healthiness.

Such is the general rule; and accordingly I would suggest to you that the presence of epidemic cholera, instead of serving to explain away the local inequalities of mortality, does, in fact, only constitute a most important additional testimony to the salubrity or insalubrity of a district, and renders more evident a disparity of circumstances which was previously decided. The frightful phenomenon of a periodic pestilence belongs only to defective sanitary arrangements; and, in comparing one local death-rate with another, it is requisite to remember that, in addition to the ordinary redundancy of deaths which marks an unhealthy district, there is a tendency from time to time to the recurrence of epidemic pestilence,

which visits all unhealthy districts disproportionately, and renders their annual excess of mortality still more egregious and glaring.

As materials which may aid you to estimate the sanitary defects of the City, I subjoin two tables illustrating the relative mortality of the several sub-districts. The first of these tables indicates numerically the local distribution of the year's deaths, and gives their proportion to the population of each district and sub-district. The second relates particularly to the last quarter, and illustrates the pressure of the epidemic. The two together furnish a synoptical view of the several rates of mortality, as calculated for the entire City, for the Unions separately, for the sub-districts separately, and for the last quarter of the year separately. In the laborious process of constructing these tables, I have been careful to avoid every source of inaccuracy, and believe that they present you with a true measure of the health of the City during the past year.

From these comparative tables it will be observed, that the high mortality of the population does not affect the entire City equally; that, in some of its portions, the rate of death approaches the *minimum* standard much more nearly than in others; that in those districts where the general rate is best, the temporary aggravation from epidemic causes has likewise been least; and that our

aggregate City rate, either for ordinary times or for a period of epidemic disease (*vide* table 2,) is compounded from the joint result of several very different proportions. Reference to the Registrar-General's tables will enable any one to see that the ordinary rate of mortality for the West London Union is a fourth higher than the rate for the City of London Union, while the rate for the East London Union bears a still higher proportion; and it is out of these very different rates that an aggregate rate is struck for the whole City, comprising the three unions referred to. It will be obvious that many parts of the City are much healthier than this aggregate rate would signify, while others are much unhealthier. In regard of last year, for instance (*vide* table 1), the aggregate rate of mortality was (as I have stated) 30 per thousand of the general population of the City; but if this rate be analysed by examination of the sub-district mortality, it will be seen that in one sub-district the rate of death stood nearly as low as 20, that in another (of the same union) it rose to 36, and in a third sub-district (of another union) to within a small fraction of 40.

If it were possible to furnish you with statistics derived from a still smaller sub-division of each district, these points would be infinitely more manifest. In some limited localities of the City, you would probably find an approximation to the average mortality of suburban districts; while

in other spots, if they were isolated for your contemplation, you would see houses, courts, and streets where the habitual proportion of deaths is far beyond the heaviest pestilence-rate known for any metropolitan district aggregately—localities, indeed, where the habitual rate of death is more appalling than any which average figures can enable you to conceive.

These facts are quite unquestionable, and I have felt it my duty to bring them under your notice as pointedly and impressively as I can; feeling assured, as I do, that so soon as you are cognizant of them, every motive of humanity, no less than of economical prudence, must engage you to investigate with me, whether or not there may lie within your reach any adoptable measures for lessening this large expenditure of human life, and for relieving its attendant misery. It is, therefore, with the deepest feeling of responsibility that I proceed to fulfil the main object of my First Annual Report, by tracing these effects to their causes, and by explaining to you, from a year's observation and experience, what seem to me the chief influences prevailing against life within the City of London.

My remarks for this purpose will fall under the following heads, viz. :—

I. Defective house-drainage.

II. Incomplete and insufficient water-supply.

III. Offensive or injurious trades and occupations.

IV. Intramural burials.

V. Houses insusceptible of ventilation, and absolutely unfit for habitation.

VI. The personal habits of the lowest classes, and the influence of destitution in increasing their mortality.

In treating of these topics, I shall not pretend to bring before you all the details on which my opinions are founded, or to enumerate under each head those infinite individual instances which require sanitary correction. It is my wish at this time to submit to you only such general considerations as may show you the largeness of the subject, its various ramifications, and its pressing importance ; and it is my hope that these considerations may suffice to convince you of the necessity which exists, for some effective and permanent sanitary organization of the City of London.

HOUSE-DRAINAGE.

I. It is not in my power to lay before you any numerical statement of the proportion of drained to undrained houses. From such information as I possess, I may venture to speak of imperfect house-drainage as having been a general evil in all the poorer districts of the City; and the latest intelligence on the subject leads me to consider this great evil as but very partially removed. So far as I can calculate from very imperfect materials, I should conjecture that some thousands of houses within the City still have cesspools connected with them. It requires little medical knowledge to understand that animals will scarcely thrive in an atmosphere of their own decomposing excrements; yet such, strictly and literally speaking, is the air which a very large proportion of the inhabitants of the City are condemned to breathe. Sometimes, happily for the inmates, the cesspool in which their ordure accumulates, lies at some small distance from the basement-area of the house, occupying the subsoil of an adjoining yard, or (if the privy be a public one) of some open space exterior to the private premises. But in a very large number of cases, it

lies actually within the four walls of the inhabited house; the latter reared over it, as a bell-glass over the beak of a retort, receiving and sucking up incessantly the unspeakable abomination of its volatile contents. In some such instances, where the basement story of the house is tenanted, the cesspool lies—perhaps merely boarded over—close beneath the feet of a family of human beings, whom it surrounds uninterruptedly, whether they wake or sleep, with its fetid pollution and poison.

Now, here is a removable cause of death. These gases, which so many thousands of persons are daily inhaling, do not, it is true, in their diluted condition, suddenly extinguish life; but, though different in concentration, they are identically the same in nature with that confined sewer-gas which, on a recent occasion, at Pimlico, killed those who were exposed to it with the rapidity of a lightning stroke. In their diluted state, as they rise from so many cesspools, and taint the atmosphere of so many houses, they form a climate the most congenial for the multiplication of epidemic disorders, and operate beyond all known influences of their class in impairing the chances of life.

It may be taken as an axiom for the purposes of sanitary improvement, that every individual cesspool is hurtful to its vicinage; and it may hence be inferred how great an injury is done to the public health by their existence in such numbers, that

parts of the City might be described as having a cesspool-city excavated beneath it.

I beg most earnestly to press on the consideration of your Honourable Court, the extreme importance of proceeding with all convenient speed to alter this very faulty construction, and to substitute for it an arrangement compatible with the health of the population.

While addressing you on this subject, and while congratulating your Honourable Court on the fact, that public attention is so much directed to a matter in which your exertions are certain to effect large and salutary reform, I cannot refrain from expressing a wish, that more accurate knowledge prevailed among the public as to the history and jurisdiction of the nuisance in question. It seems constantly to be forgotten, that your responsibility in the matter dates but from last January. The cesspool nuisance has been the slow growth of other less enlightened ages, not in the City merely, but in the whole metropolis, and in all other towns in England. The extreme injury which it inflicts on the health of the population, and the vital necessity of abating that injury, are points which only began to claim attention in this country about ten years ago, and which have since but very slowly been forcing their way (chiefly through the indomitable zeal and perseverance of Mr. Chadwick) into that share of notice which they deserve. House-

drainage, with effective water supply, are the only remedies which can avail; and it is only during the present year, that authority to enforce these measures has been vested by the Legislature in any public bodies whatsoever.

Before the month of January last (when your increased jurisdiction was established), it appears to me that, for the existence of cesspools in the City, you had no more responsibility than for the original site of the metropolis, or for the architecture of Westminster Abbey.

During the last ten months, however, the care of effective house-drainage has rested solely and entirely with your Honourable Court; for two of those ten months, I thought it desirable, on account of the epidemic, that no considerable disturbance of the soil should take place in the construction of new works; in the remaining eight months, two miles of new sewer were formed, and 900 houses were drained for the first time.

If the house-drainage of the City had depended for its completion, even since that time, solely on the labours of this Commission, no doubt it would have proceeded at a far quicker pace. How effectively your Honourable Court had prepared for the best application of your increased powers, is sufficiently evinced in the 45 miles of sewerage, ramifying through all the districts of your jurisdiction, ready at every point to receive the streams of private drainage, and leaving to the owners of house-

property (with few exceptions) no excuse for their non-performance of these necessary works. I believe the extent of public sewerage within the City to be quite unparalleled, and to furnish facilities of the rarest kind for the abolition of cesspools, and for the establishment of an improved system of house drainage. But, Gentlemen, while you have exerted yourselves to the utmost in the application of your increased authority, and have directed your staff of officers, from first to last, to proceed with all possible despatch in enforcing sanitary improvement in the matter now under consideration, the intentions of your Court and the industry of its officers have been in a great measure frustrated by the passive resistance of landlords. Delays and subterfuges have been had recourse to by the owners of house-property, in order to avoid compliance with the injunctions of the Commission; and the temporary interruption of works, which occurred in August and September, prevented these evasions from being dealt with as otherwise they would have been.

Now, however, the course is again open. For some weeks your Honourable Court has directed that all works of drainage and sewerage shall proceed; many are already in progress; and I can see no reason why, within a year from the present time, the number of cesspools and of undrained houses within the City of London should not be reduced to a very small proportion.

Everything, however, in this respect will depend on the spirit of *thoroughness* with which the Act of Parliament is enforced; and I would strongly recommend, in all cases of non-drainage or other non-compliance with the terms of notice, that no indulgence whatever should be conceded to landlords beyond the time specified in the notification of the Court; that no difference should be recognised between a 'notice' and 'a peremptory notice;' that all notices should be 'peremptory,' and that, a certain period for performance having been allowed to the landlord, on the very day of that period's expiration, the work, if undone, should be given over for completion by the workmen of the Commissioners of Sewers, in accordance with the 61st clause of the Act of Parliament. In favour of the adoption of this principle, I can adduce no stronger argument than my conviction, that its non-adoption would insure a sacrifice of human life, in exact proportion to the procrastination allowed; and that, too, in a matter where henceforth your responsibility is undivided and your power absolute.

In order to give efficiency to whatever improvements of house-drainage may be instituted, the present system of water-supply will require to undergo very extensive modifications; for at present in the poorer tenements, even where some show of house drainage is made, the arrangements are constantly rendered inoperative from insufficiency

or absence of water. To this matter, however, I shall presently revert.

Another most important *desideratum* in connexion with the sewerage of the City is that, if possible, some more perfect system of trapping should be devised, or that, in some way or other, the sewers should be ventilated effectively and inoffensively. At present there are frequent complaints of offensive exhalation from gratings in the open ways of the City, and it will be obvious to your Honourable Court, that all which I have urged on the subject of cesspool-exhalations must apply equally to those which are emitted from sewers. The impediments to effective trapping are almost insuperable; but I believe that when the water-supply of the City is very largely increased, washing the drains amply and incessantly, the evil complained of will undergo a sensible diminution. So far as I can judge, the only complete and total cure would consist in the adoption of some system, including the following points as its essentials—viz., that house-drainage shall be separate from street-drainage, the former having to itself a series of smaller conduits; that these shall be closed from their origin to their outfall, presenting no gully-holes whatever; and that their gaseous contents shall be withdrawn from them by suction, or expelled by pressure, and be made to undergo combustion, or other chemical change,

rendering them innocuous. I would venture, even now, to suggest that any scientific scheme, purporting to accomplish the object last indicated, would in a very high degree deserve the consideration and encouragement of your Honourable Court.

In further connexion with my present subject, I would also solicit attention to the fact that the sanitary purposes of drainage are but imperfectly achieved, where the outfall of sewerage is into a tidal river passing through the heart of a densely peopled metropolis. I should be stepping beyond my province, if I were to say much respecting the schemes now before the public for dealing with the difficulty to which I here refer, in so much as those schemes involve questions of engineering and machinery, on which I am incompetent to form an opinion. But I can have no hesitation in stating it as a matter greatly to be desired in the City of London, that the noble river which ebbs and flows beneath its dwellings should cease to be the drain-pool of our vast metropolis, and that the immeasurable filth which now pollutes the stream should be intercepted in its course, and be conveyed to some distant destination, where, instead of breeding sickness and mortality, it might become a source of agricultural increase and national wealth.

I would venture, likewise, to express an opinion

that the City of London is peculiarly interested in the accomplishment of this great public work, not only on general grounds relating to the conservancy of the river, but likewise and especially on sanitary grounds, by reason of the large bankside population, subjects of the City, who now, instead of deriving advantage from their nearness to the stream, are constantly disgusted and injured by its misuse.

While the consideration of this most important measure is pending, I would invite attention to some circumstances, by which even the present evil is needlessly aggravated.

In the first place, the sewers are of defective length, so that during the ebb of the tide their contents, as they escape, are suffered to flow in a stream of some length across the mud of the retreating river. This stream, together with the mud which it saturates, and the open mouth of the sewer, evolve copious and offensive exhalations, and I would recommend that measures be taken for abatement of the nuisance. This purpose, as concerns the sewer, would be fulfilled by the addition, in each instance, of a sufficient length of brick or cast-iron work, to prolong the canal beyond low water mark; but the great extent of mud which is left uncovered at each tide, and which during the present pollution of the river is a source of extreme nuisance and of disease, constitutes an evil for which no remedy can

be found till the stream shall be narrowed and embanked.

Meanwhile, the complaints which reached the Committee of Health during the summer, together with the results of my own inspection, lead me to believe that the several small docks which lie along the City bank of the river from the Tower to the Temple, fulfil little really useful purpose ; that they are to a great extent used as laystalls for their vicinage ; that copious deposits and accumulations of filth take place in them ; that they are a nuisance and injury, except to the very few who are interested in their maintenance ; and that it would be of public advantage that they should be filled up. In these opinions, I am glad to have the concurrence of the Surveyor of your Honourable Court.

WATER-SUPPLY.

II. I am sure that I do not exaggerate the sanitary importance of water, when I affirm that its unrestricted supply is the first essential of decency, of comfort, and of health; that no civilization of the poorer classes can exist without it; and that any limitation to its use in the metropolis is a barrier, which must maintain thousands in a state of the most unwholesome filth and degradation.

In the City of London the supply of water is but a fraction of what it should be. Thousands of the population have no supply of it to houses where they dwell. For their possession of this first necessary of social life, such persons wholly depend on their power of attending at some fixed hour of the day, pail in hand, beside the nearest standcock; where, with their neighbours, they wait their turn—sometimes not without a struggle, during the tedious dribbling of a single small pipe. Sometimes there is a partial improvement on this plan; a group of houses will have a butt or cistern for the common use of some scores of inmates, who

thus are saved the necessity of waiting at a stand-cock, but who still remain most insufficiently supplied with water. Next in the scale of improvement we find water-pipes laid on to the houses; but the water is turned on only for a few hours in the week, so that all who care to be adequately supplied with it must be provided with very spacious receptacles. Such receptacles are sometimes provided: and in these (which are often of the most objectionable description) water is retained for the purposes of diet and washing, during a period which varies from twenty-four to seventy-two hours. One of the most important purposes of a water supply seems almost wholly abandoned—that, namely, of having a large quantity daily devoted to cleanse and clear the house-drains and sewers; and in many cases where a waste-pipe has been conducted from the water-butt to the privy, the arrangement is one which gives to the drainage little advantage of water, while it communicates to the water a well-marked flavour of drainage.

I consider the system of intermittent water-supply to be radically bad; not only because it is a system of stint in what ought to be lavishly bestowed, but also because of the necessity which it creates that large and extensive receptacles should be provided, and because of the liability to contamination incurred by water which has to be retained often during a considerable period. In inspecting the courts and alleys of the City, one

constantly sees butts for the reception of water, either public, or in the open yards of the houses, or sometimes in their cellars; and these butts, dirty, mouldering, and coverless; receiving soot and all other impurities from the air; absorbing stench from the adjacent cesspool; inviting filth from insects, vermin, sparrows, cats, and children; their contents often augmented through a rain water-pipe by the washings of the roof, and every hour becoming fustier and more offensive. Nothing can be less like what water should be than the fluid obtained under such circumstances, and one hardly knows whether this arrangement can be considered preferable to the precarious chance of scuffling or dawdling at a standcock. It may be doubted, too, whether, even in a far better class of houses, the tenants' water-supply can be pronounced good. The cisternage is better, and all arrangements connected with it are generally such as to protect it from the grosser impurities which defile the water-butts of the poor; but the long retention of water in leaden cisterns impairs its fitness for drinking; and the quantity which any moderate cistern will contain is very generally insufficient for the legitimate requirements of the house during the intervals of supply. Every one who is personally familiar with the working of this system of intermittent supply, can testify to its inconvenience; and though its evils press with immeasurably greater severity

on the poor than on the rich, yet the latter are by no means without experience on the subject.

The following are the chief conditions in respect of water supply, which peremptorily require to be fulfilled :—

1. That every house should be separately supplied with water, and that where the house is a lodging-house, or where the several floors are let as separate tenements, the supply of water should extend to each inhabited floor.

2. That every privy should have a supply of water, applicable as often as it may be required, and sufficient in volume to effect at each application, a thorough flushing and purification of the discharge-pipe of the privy.

3. That in every court, at the point remotest from the sewer-grating, there should be a stand-cock for the cleansing of the court ; and

4. That at all these points there should always and uninterruptedly be a sufficiency of water to fulfil all reasonable requirements of the population.

Now, if my statements are accurate with regard to the imperfect manner in which thousands participate in the distribution of water, even for their personal necessities ; if my statements are again accurate with respect to house drainage, and

to the immense increase of water distribution which must accompany any improvement in this respect—and I am quite prepared, if necessary, to adduce ample evidence on these subjects; if, again, it be considered that the appreciation of water by the multitude, who have so long suffered from lack of it, will lead to a vast augmentation of its domestic use, then, I apprehend, it cannot be doubted that the subject of water-supply to the City is one that requires now to be looked at, almost as though it were to-day broached for the first time.

Those important conditions, which I just enumerated as urgently requiring fulfilment, may certainly be accomplished, so far as mechanical construction is concerned, in either of two ways. It would be possible, no doubt, in further compliance with the principle of intermittent supply, to furnish every tenement in the City with a cistern of proper dimensions, and with its usual appurtenances of ballcock, waste-pipe, &c.; but this, I need hardly say, would be a process involving a vast expenditure of money, and hardly to be recommended on the mere ground of conformity with what has hitherto been done in the matter. It would be possible, on the other hand, to convert the whole water-supply of the City into a system of uninterrupted supply, and to construct all new works in conformity with this system.

I beg to suggest that the choice between these alternatives, is one of immense and very urgent

importance to the sanitary welfare of the City; and I would earnestly commend it to the best consideration of your Honourable Court.

The system of a continued supply is now no longer a novelty. In Philadelphia, in New York, in Nottingham, in Preston, in Glasgow, in Newcastle, in Bristol, and in various other places, this system has been adopted; its practicability and its advantages have been amply demonstrated. Five years ago, when evidence on the subject was given before the House of Commons, it appeared that in the city and suburbs of Philadelphia 25,816 houses were supplied at an average rate of five dollars per house; that in Preston more than 5,000 houses were supplied continually at high-pressure, and that the company was increasing its tenants at the rate of 400 annually; that in Nottingham about 8,000 houses, containing a population of 35,000 persons, were supplied in the same manner; and in respect of many other towns, public experience has been equally extensive and satisfactory. About a month ago, the Sanitary Committee of the last mentioned town published what I may call a report of congratulation on their freedom from cholera, which had visited the town with great severity in 1832. They detail the measures by which Nottingham has been rendered a healthy town, and the first item in that enumeration stands thus:—‘An unlimited supply of wholesome filtered water, forced, by day and night, at high pressure,

through all the streets to the tops of almost all the houses, at a cost, for the dwellings of the poor, of about five farthings per week.'

On the relative merits or demerits of the two competing systems of supply, I have only to speak so far as their adaptation to sanitary purposes is concerned. In this respect, I have no hesitation in saying that the system of constant high-pressure supply is immeasurably superior to its rival; so superior, that unless competent engineering authorities should decide on its practical inapplicability to the City of London, I would strongly recommend its adoption as the only one, in my judgment, by which the growing necessities of the population can be fully and effectively satisfied.

OFFENSIVE AND INJURIOUS TRADES.

III. With respect to offensive trades and occupations pursued within the city of London, my task of recommendation is an easy one. To any person conversant with the simplest relations of cause and effect, it is quite notorious that the decomposition of organic matter within a certain distance of human habitations, unfailingly tends to produce disease; and every one who is competent by knowledge and impartiality to pronounce an opinion on the subject, must feel that no occupation which ordinarily leaves a putrid refuse, nor any which consists in the conversion or manufacture of putrescent material, ought, under any circumstances, to be tolerated within a town.

1. First, in regard to slaughter-houses, I may remind you that, on the 23rd of January last, when your Honourable Commission first met under the new Act of Parliament, I recommended to you on sanitary grounds, that in such rules as you might make for the regulation of slaughter-houses, all underground slaughtering should be absolutely prohibited. It was laid down, however, that your Act of Parliament would not enable you to estab-

lish this restriction, which (it was argued) would be equivalent to a direct suppression of many existing slaughter-houses.

Considering that, in my first recommendations to the Commission, I ought to confine myself to objects attainable by means of the Act of Parliament then just coming into operation, I felt myself precluded for the time from entering on the subject (however important in itself) of the total abolition of urban slaughtering. Now, however, while treating generally of sanitary improvement for the City, I can have no hesitation in repeating an opinion which I have already submitted to the Health-Committee of the Common Council; and I beg accordingly to state that I consider slaughtering within the City as both directly and indirectly prejudicial to the health of the population;—*directly*, because it loads the air with effluvia of decomposing animal matter, not only in the immediate vicinity of each slaughter-house, but likewise along the line of drainage which conveys away its washings and fluid filth; *indirectly*, because many very offensive and noxious trades are in close dependence on the slaughtering of cattle, and round about the original nuisance of the slaughter-house, within as narrow limits of distance as circumstances allow, you invariably find established the concomitant and still more grievous nuisances of gut-spinning, tripe-dressing, bone-boiling, tallow-melting, paunch-cooking, &c. Ready illustrations

of this fact may be found in the gut-scraping sheds of Harrow-alley, adjoining Butchers'-row, Aldgate; or in the Leadenhall skin-market, contiguous to the slaughtering places, where the stinking hides of cattle lie for many hours together, spread out over a large area of ground, waiting for sale, to the great offence of the neighbourhood.

Such evils as those to which I have adverted are inseparable from the process of slaughtering, however carefully and cleanly conducted; and they may easily be aggravated to an unlimited extent by defects in drainage, in water-supply, or in ventilation, or by the slovenly habits and impunctuality of those to whom the removal of filth and offal is intrusted.

In short, I believe it to be quite impossible, so to conduct the process of slaughtering within the City of London as to remove it from the category of nuisances, or to render it harmless to the health of the population; and I believe it to be equally impossible, so to superintend the details of its performance, as to prevent them, where ill-administered, from rising into considerable and fatal importance among the promoting causes of epidemic and infectious disease.

It is scarcely necessary, after this expression of my opinion, that I should say how strongly I would recommend that measures should be taken for the discontinuance of all slaughtering within

the City ; and that, with the abolition of slaughtering, all establishments which deal with animal matter approaching putrefaction, and all sheds and stalls, for the continued keeping of cattle, should likewise be prohibited and suppressed.

The number of slaughter-houses at present registered and tolerated within the City amounts to 138, and in 58 of these the slaughtering occurs in vaults and cellars. How overwhelming an amount of organic decomposition must be furnished by these out of the blood and offal merely of those '450,000 sheep and 60,000 cattle which annually pass over Blackfriars-bridge alone,' can neither be estimated nor conceived ; but the influence of that decomposition admits of being measured in its effects on the population, and in the high zymotic mortality which denotes an atmosphere overladen with organic poison.

Before leaving this subject, I think it right very briefly to allude to an argument which is often objected to the view here stated. The objector looks to a particular district, or to a particular slaughter-house, and says that the mortality of the district is an average one ; or he points to Mr. A. or Mr. B. the butcher, or the butcher's man, saying, ' Who can be healthier than A. or B ? Surely, if the pursuit be injurious, these men ought to have been poisoned long ago.' Now, to this I reply ;—first, as regards the men employed in these

crafts, we have no statistics of any value to decide on their mortality, and judgment on the matter cannot be deduced from some half dozen cases, known to any of us individually; but, further, if we admit (which I by no means know to be the case) that they are persons of average longevity and healthiness, then it must be remembered that their activity, their out-door exercise, and, above all, their unlimited supply of animal food, are circumstances conducing to give them health beyond the average of their station; and it must be remembered that these palliating circumstances, though they may counteract the evil for those persons most nearly concerned in it, contribute nothing towards 'deodorising' the neighbourhood, or towards preserving its poorer inhabitants from the depressive influence of putrid emanations.

And, as regards the district—although we have certain evidence that organic decomposition is a chief cause of disease, yet we do not invariably find disease generated in immediate proximity to the source of nuisance. Drainage beneath the soil, and currents of air above it, convey the materials of decomposition to a distance; and if the particular slaughterhouses be placed on a high level amidst the surrounding City, so that their drainage be effectual and their ventilation complete, then obviously their influence must be sought for, not so much in any special aggravation of the local mortality, as in certain remoter effects of their

diffused emanation ; in effects, namely, which are discoverable along their lines of drainage and ventilation, and in the various consequences of a highly zymotic atmosphere generally through the entire town.

2. With regard to such trades as are considered to be simply offensive, and where the evidence of injury to health is indirect and uncertain, I can hardly doubt that a wise legislation would exclude them also from the circle of the metropolis. Tallow-melting, whalebone-boiling, gas-making, and various other chemical proceedings, if not absolutely injurious to life, are nuisances at least, in the ordinary language of the law, or are apt to become such. It is the common right of the neighbourhood to breathe an uncontaminated atmosphere ; and, with this common right, such nuisances must, in their several degrees, be considered to clash. It might be an infraction of personal liberty, to interfere with a proprietor's right to make offensive smells within the limits of his own tenement, and for his own separate inhalation ; but surely it is a still greater infraction of personal liberty when the proprietor, entitled as he is to but the joint use of an atmosphere, which is the common property of his neighbourhood, assumes what is equivalent to a sole possession of it, and claims the right of diffusing through it some nauseous effluvium which others, equally with himself, are

thus obliged to inhale. Such, as it appears to me, is the rational view of this matter; and although I am not prepared to speak of these trades in the same terms as I applied to slaughtering and its kindred occupations,—although, that is to say, I cannot speak of them as injurious to health on any large scale, yet I would respectfully submit to your Honourable Court that your Act of Parliament empowers you to deal with such nuisances in respect of their being simply offensive.

3. Under the same head, I would likewise beg leave to suggest whether it might not be practicable for your Honourable Court to regulate the operation of establishments which evolve large volumes of smoke. The exterior dirtiness and dinginess of London depend mainly on this cause; and the same influence, by rendering domestic cleanliness difficult and expensive, creates an additional impediment to its cultivation. People naturally despair of cleansing that which a day's exposure to the atmosphere blackens again with soot; or they keep their windows shut, breathing a fusty and unwholesome air, in the hope of excluding the inconvenience. Now, when it is remembered that all the smoke of London is but so much wasted fuel, it must surely be felt that the enforcement of measures for its consumption would be to the interest of all parties; amply economizing to the manufacturer, whatever might be the trifling expense of appro-

priate arrangements, while it would relieve the public of that which, called by the mildest name, is a nuisance and a source of heavy expense.

INTRAMURAL BURIAL.

IV. The subject of intramural burial is the next on which I have to report, as affecting the health of the City.

In compliance with an order of the Health Committee, I have examined as fully as circumstances would allow into the requirements of the City of London in respect of burial accommodation, and the result of my inquiry obliges me to express my conviction, that the City can no longer with safety or propriety be allowed to furnish intramural interment to its dead.

In all those larger parochial burying-grounds where the maintenance of a right to bury can be considered important,—in all such, and in most others, too, the soil is saturated and super-saturated with animal matter undergoing slow de-

composition. There are, indeed, few of the older burial-grounds of the City where the soil does not rise many feet above its original level, testifying to the large amount of animal matter which rots beneath the surface. The vaults beneath churches are, in many instances, similarly overloaded with materials of putrefaction, and the atmosphere, which should be kept pure, and without admixture for the living, is hourly tainted with the foetid emanations of the dead. For the most part, houses are seen to rise on all sides in immediate contiguity to the burial-ground, forbidding the possibility of even such ventilation as might diminish the evil, and the inhabitants of such houses complain bitterly, as they well may, of the inconvenience which they suffer from this confined and noxious atmosphere.

With respect to burial in vaults, which prevails to a very great and dangerous extent in this City, I may observe that, among persons who are ill-informed on the subject, there exist erroneous notions as to the preservation of bodies under these circumstances. They are supposed, from the complete closure of their coffins, to remain unchanged for ages, like the embalmed bodies of Egypt and Peru; or, at least, if perhaps they undergo some interior and invisible change (as the chrysalis within its sheath), that there is no interference with the general arrangement, no breach in the compact-

ness of the envelope. Nothing can be less correct than this supposition.

It is unnecessary that I should detail to you the process of decay, as it occurs within the charnel-house, nor need I inquire for your information whether indeed it be true, as alleged, that part of the duty of a sexton consists in tapping the recent coffins, so as to facilitate the escape of gases which otherwise would detonate from their confinement. It is sufficient that I should state, that whether such be or be not the duty of the functionary in question, a time certainly comes, sooner or later, when every corpse buried in the vault of a church spreads the products of its decomposition through the air as freely as though no shell had enclosed it. It is matter of the utmost notoriety that, under all ordinary conditions of vault-sepulture, the wooden case of the coffin speedily decays and crumbles, while the interior leaden one, bending with the pressure of whatever mass may be above it, (or often with its own weight,) yields, bulges, and bursts as surely as would a paper hat-box under the weight of a laden portmanteau.

If the accuracy of this description be doubted, let inquiry be made on a large scale after the coffins of 40 years back—let it be seen how many will appear! If, on the contrary, its accuracy be granted, then I apprehend nothing further need be urged, to establish the importance of abolishing a system which maintains on so large a scale the

open putrefaction of human remains within places of frequent resort, and in the midst of populous habitations.

It is a very serious matter for consideration, that close beneath the feet of those who attend the services of their church, there often lies an almost solid pile of decomposing human remains, co-extensive with the area of the building, heaped as high as the vaulting will permit, and generally (as I have shown) but very partially confined. And if it be the case (as perhaps it may be), that the frequenters of the place of worship do not complain of any vitiation of their atmosphere, or perhaps do not experience it, not the less is it true that such a vitiation occurs, and (whether to the special detriment of the congregation or not), contributes to the overladen putrefactiveness of our London atmosphere.

In respect of such vaults, I do not consider that the mere cessation of burial in them will be sufficient; seeing that at the present moment they contain amongst them many thousand coffins, as yet tenanted by the materials of decomposition; and year after year, if left in their present state, these will be poisoning the air with successive instalments of their progressive decay. It seems to me quite indispensable that some comprehensive measure should be undertaken, for abolishing at once and for ever all burial within the City of London. Conjointly with the general application

to Parliament, for prohibition of further intramural sepulture, I would recommend that authority be obtained by the City, for its several parishes to procure the decent removal to extramural cemeteries of such coffins as already occupy their vaults; or, failing this measure, I would recommend that all coffins now lying within vaults, be walled up in their present resting-places, with uniform impermeable masonry. For very obvious reasons I should prefer the former plan to the latter.

Intramural burial is an evil, no doubt, that varies in its intensity according to the numbers interred; becoming appreciable in its effects on health, (so far as the rough measure of statistics can inform us,) only when several interments occur annually, or when ground is disturbed wherein much animal matter had previously been left to decay. But, be the evil large or little in any particular case, evil undoubtedly it is in all, and an unmitigated evil.

The atmosphere in which epidemic and infectious diseases most readily diffuse their poison and multiply their victims is one, as I have already often stated, in which organic matters are undergoing decomposition. Whence these may be derived signifies little. Whether the matter passing into decay be an accumulation of soaking straw and cabbage leaves in some miserable cellar, or the garbage of a slaughter-house, or an overflowing cesspool, or

dead dogs floated at high water into the mouth of a sewer, or stinking fish thrown overboard in Billingsgate-dock, or the remains of human corpses undergoing their last chemical changes in consecrated earth, the previous history of the decomposed material is of no moment whatever. The pathologist knows no difference of operation between one decaying substance and another; so soon as he recognizes organic matter undergoing decomposition, so soon he recognizes the most fertile soil for the increase of epidemic diseases; and I may state with certainty, that there are many churchyards in the City of London where every spadeful of soil turned up in burial sensibly adds to the amount of animal decomposition, which advances too often inevitably around us. I have therefore no hesitation in accounting intramural interments as one of the influences prevailing against health within the City of London; and I have no doubt that it contributes considerably to swell our lists of deaths from fever and the allied disorders.

Nor can I refrain from adding, as a matter claiming attention, that in the performance of intramural interment there constantly occur disgusting incidents dependent on overcrowdedness of the burial-ground; incidents, which convert the extremest solemnity of religion into an occasion for sickness or horror; perhaps mingling with the ritual of the Church some clamour of gravediggers

who have miscalculated their space; perhaps diffusing amidst the mourners some nauseous evidence and conviction, that a prior tenant of the tomb has been prematurely displaced, or that the spade has impatiently anticipated the slower dismembering of decay. Cases of this nature are fresh in the memory of the public; cases of extreme nuisance and brutal desecration in place of decent and solemn interment; and it is unnecessary that I should revive the record of transactions inconsistent with even the dawn of civilization.

From the circumstances which I have mentioned, it can hardly fail to appear most desirable to you, that the use of some spacious and open cemetery at a distance from the City should be substituted for the present system of intramural interment; and the urgency of this requirement will be demonstrated all the more cogently, when it is remembered that the annual amount of mortality in the City averages above 3000, and that under the present arrangements every dead body buried within our walls receives its accommodation at the expense of the living, and to their great detriment.

In recommending that consideration be given, at as early a period as possible, to the means for establishing some sufficient municipal cemetery (a consideration which, for obvious reasons, must be prior to any Parliamentary proceedings for the

prohibition of intramural interments), there are three points to which even now I think it advisable to advert, as essential to the admissibility of such a plan. I would submit, first, that the site of any such cemetery must be sufficiently remote from the metropolis to obviate any repetition of the present injury to a resident population; and I hardly know how this purpose can be attained, without going some distance beyond the immediate suburbs of London as indicated by the Bills of Mortality:—secondly, that the space required for the proper inhumation of the dead of the City of London would be not less than 35 acres; and, thirdly, I would suggest that the charter of such an establishment ought to contain provisions against the erection of houses within a certain distance of the burial-ground, so that this may at all times and under all circumstances be surrounded, exterior to its wall, by a considerable belt of land totally devoid of resident population. The absence of such a provision as the last would very soon lead to the extramural cemetery becoming *intramuralized* by the growth of a new suburb around it, and would again evince, by new and unnecessary illustrations, how incompatible with each other are the Dead and the Living as tenants of one locality.

HOUSES PERMANENTLY UNFIT FOR HABITATION.

V. Under the last heads of my Report I have touched on matters, which (in so far as they cannot be adjusted without Parliamentary interference) may be considered to lie beyond the present jurisdiction of the Commissioners of Sewers; and the topic which I now approach may, perhaps, be considered equally foreign to the scope of your ordinary functions.

I have to report that there are houses and localities within the City which are irremediably bad;—places, which the uninterrupted presence of epidemic disease has stamped as absolutely unfit for human habitation; places, where drainage and water-supply, indeed, are defective, but where the perfection of these necessities might exist, in all probability, without giving healthiness to the inhabitants. The predominant evil in the localities referred to is their thorough impossibility of ventilation.

While treating of the manner in which noxious

emanations are conveyed to a distance, and are enabled to diffuse their influence over a whole town, instead of concentrating it in some single slaughter-house or burial-ground, I indirectly suggested what I have now to illustrate; that all the evils of all the nuisances in existence acquire their utmost local intensity of action, when the diffusion of their gaseous products is interfered with, and when, from absence of ventilation, these are retained in the immediate vicinity of their source.

The inhabitants of open streets can hardly conceive the complicated turnings, the narrow inlets, the close parallels of houses, and the high barriers of light and air, which are the common characteristics of our courts and alleys, and which give an additional noxiousness even to their cess-pools and their filth. There are very few who, without personal verification, would credit an account that might be given of the worst of such dwelling-places. Let any one, however, who would do full justice to this frightful subject, visit the portion of Bishopsgate which lies east of Houndsditch, or the upper portion of Cripplegate, which contain some of the worst, though by no means the only instances, of pestilential residence. A man of ordinary dimensions almost hesitates, lest he should immovably wedge himself, with whomsoever he may meet, in the low and narrow crevice which is called the entrance to some such court or alley; and, having passed that

ordeal, he finds himself as in a well, with little light, with less ventilation, amid a dense population of human beings, with an atmosphere hardly respirable from its closeness and pollution. The stranger, during his visit, feels his breathing constrained, as though he were in a diving-bell; and experiences afterwards a sensible and immediate relief as he emerges again into the comparatively open street.

Now, I am prepared to show that there are many, very many, courts within the City, to which the above description accurately applies; courts and alleys hemmed in on all sides by higher houses; having no possibility of any current of air; and (worst of all) sometimes so constructed back to back, as to forbid the advantage of double windows or back doors, and thus to render the house as perfectly a *cul-de-sac* out of the court, as the court is a *cul-de-sac* out of the next thoroughfare.

It is surely superfluous to observe, that these local conditions are utterly incompatible with health. Among their dense population it is rare to see any other appearance than that of squalid sickness and misery; and the children, who are reproduced with the fertility of a rabbit-warren, perish in early infancy. In the worst localities probably not more than half the children born survive their fifth year, and of the 3,799 deaths

registered last year in the City of London generally, 1,410 were at or under seven years of age.

The diseases of these localities are well marked. Scrofula more or less completely blights all that are born: often extinguishing life prematurely; in childhood, by hydrocephalus; in youth by pulmonary and renal affections, which you read of as consumption and dropsy; often scarring and maiming, where it does not kill, and rendering life miserable by blindness, decrepitude, or deformity; often prolonging itself as an hereditary curse in the misbegotten offspring of those, who, under such unnatural conditions, attain to maturity and procreation.

Typhus prevails there too, not as an occasional visiter, but as an habitual pestilence.

It is impossible for me, by numbers, to give you an exact knowledge of the fatality of such spots; because, in the greater part of the City, hospitals, dispensaries, and private practice, divide the treatment of the sick with the parochial officers, and diminish the returns of sickness which those officers would otherwise have to show. But this I may tell you, as an illustration of what I state:—that in the few houses of Seven-Step-alley and its two offsets, (Amelia-place and Turner-square,) there occurred last year 163 parochial cases of fever; in Prince's-place and Prince's-square, 176 cases, (think, Gentlemen, if this had occurred in

Southampton-place and Russell-square!); that behind the east side of Bishopsgate, in the very small distance from Widegate-street to New-street, there were 126 cases; that behind the west side from Primrose-street to Half-moon-street, there were 245 cases; that the parish of Cripplegate had 354 cases over and above the number, (probably a very large one,) treated by private practitioners, by hospitals, and especially by dispensaries. Similarly, though with less perfect information, I am enabled to trace fever to a terrible extent in very many other localities of the City, even on the verge of its better residences, and close behind its wealthiest thoroughfares; in Plumtree-court, in Plough-court and place, in Poppin's-court, Neville's-court, Blackhorse-alley, Union-court, Plough-court in Holborn, Field-lane; in the courts right and left of King-street, Smithfield, in Hanging-sword-alley and its vicinity, in Peahen-court, in Bell-alley and its neighbourhood, in Priest's-alley, in Beer-lane, in Friar's-alley, in Bromley's-buildings, and in the whole large space which stretches from Ludgate-hill to beside the river.

And in most of these localities, in addition to other sanitary errors, there predominates that particular one to which I am now inviting your attention—the absence, namely, of sufficient ventilation.

It was in districts such as these, that in the year 1665, the Great Plague of London found the readiest facilities for its reception; and it was by

the destruction of such districts, that the Great Fire of the following year rendered the utmost conceivable service to the sanitary progress of the people, and completed their emancipation from the horrors of an unparalleled pestilence. Long intervening years have sufficed to reconstruct these miserable habitations almost after their first type, and to re-exemplify all the evils which belong to them; so completely, indeed, that if the infection of that same plague should light again amongst us, I scarcely know why it might not traverse the City, and decimate its population, as quickly and as virulently as before. Meanwhile, however, typhus with its kindred disorders, and the occasional epidemics of influenza and cholera, maintain their attachment to the soil, and require no further re-inforcement from the pestilence of other climates. From these fatal diseases we no longer hope to be rescued by a recurrence of the former casualty. The two centuries which have almost elapsed since the period referred to, have taught men better methods than a general conflagration for remedying such evils; and it is a satisfaction to believe that the wisdom and humanity of the Corporation of the City of London will apply those methods with effect.

As a palliative measure, applicable in many of the least aggravated instances, I may suggest the removal of unnecessary walls which intercept the current of air from place to place; the formation

of counter-openings in various blind courts; and, not least, in regard of many houses thus situated, the admission of light and air by additional windows. I cannot pass this portion of the subject without recording my opinion, that the operation of the window-tax is in direct opposition to the sanitary interests of the people; and I must venture to express my hope that some different method of assessment may presently be adopted, in place of one which presses on the occupier in proportion to the healthiness of his tenement. I think it very desirable, indeed almost indispensable, that your Honourable Court should have the power, under certain circumstances, to order and enforce the opening of additional windows in houses occupied by large numbers of persons, when your Officer of Health may report their ventilation defective; and if it should seem expedient to you to seek this authority from the Legislature, it might with the greatest advantage be accompanied by some concession from Her Majesty's Government, to the effect that the formation of additional windows, occurring thus under your orders for the immediate necessities of health and life, should not occasion any further assessment on the occupiers of the house.

But, Gentlemen, within the City of London there exist, to a very large extent, architectural evils for which no such palliative treatment is possible;

evils, against which I would venture to say (borrowing a metaphor from my profession) that no safety can be found except in amputation.

To dwell in hovels like pits, low-sunken between high houses, hemmed in by barriers which exclude every breath of direct ventilation—this can never be otherwise than a cause of sickness and mortality to those whose necessities allot them such residence ; and, if it be an incontrovertible fact, that subsistence in closed courts is an unhealthy and shortlived subsistence in comparison with that of the dwellers in open streets, then I apprehend, it cannot be doubted that such a manner of life ought to be dealt with as a great evil, and ought as much as possible to be interrupted.

A surveyor's inspection of the City would reveal to you many places answering to the description I have given ; places to which no ventilation could arrive except by removal of whole streets of houses which wall them in.

To remove the well-constructed houses of the City, in order that its wretched courts and alleys should participate in the blessings of light and air, might seem one method of conquering the difficulty which is before you ; but I apprehend the opposite alternative, of proceeding to a gradual suppression of all residence in the former class of dwellings, may more naturally have your approbation.

To the latter aim, sooner or later, the sanitary

efforts of the Corporation must be directed. There are many parts of the City, where great and immediate advantage would arise from an expenditure of money applied solely to the purpose of destruction ; parts, where the purchase of an entire court, or series of courts, for the sole object of pulling down houses, and leaving open spaces in their stead, would be the cheapest as well as the most effective manner of dealing with their sanitary difficulties. And I have earnestly to suggest for your consideration, that proceedings of this nature will require to be pursued to a very great extent, and at a large annual expense, within the City, before the cleanliness and habitability of its poorer localities will stand in their legitimate proportion to the modern stateliness of thoroughfare and grandeur of public buildings, which attest the magnificence of the Corporation.

I would, therefore, beg to recommend that a survey be made of the worst districts, which I have specified, with a view to the immediate purchase and destruction of some considerable portion of the Court property lying in them ; and, still more, I would urge that this is an exertion, which for some years must proceed systematically, in order to thin the density of a population which now breeds pestilence and augments mortality by its overcrowding and excess.

I am aware that considerable difficulties lie in the way of accomplishing an object of this sort

with immediate rapidity. It is my great hope, however, that the principle may be distinctly recognized; and that the City will not tolerate within its municipal jurisdiction the continuance of houses absolutely incompatible with healthy habitation. This principle being once established, and a certain annual expenditure devoted to enforce it, I feel assured that within a few years opportunities will have arisen for that outlay to have been made in the most judicious manner, and for its results amply to have demonstrated the advantages of the system which I recommend.

SOCIAL CONDITION OF THE POOR.

VI. Last, and not least, among the influences prejudicial to health in the City of London, as elsewhere, must be reckoned the social condition of the lower classes; and I refer to this the more especially, because often, in discussion of sanitary subjects before your Honourable Court, the filthy, or slovenly, or improvident, or destructive, or intemperate, or dishonest habits of these classes, are cited as an explanation of the inefficiency of measures designed for their advantage. It is constantly urged, that to bring improved domestic arrangements within the reach of such persons is a waste and a folly; that if you give them a coal-scuttle, a washing-basin, and a watercloset, each of these several utensils will be applied to the purpose of another, or one to the purposes of all; and that meanwhile the objects of your charitable solicitude will remain in the same unredeemed lowness and misery as before. Now it is unquestionable, and I admit it,—that in houses containing all the sanitary evils which I have enumerated—undrained, and waterless, and unventilated—there do dwell whole hordes of persons, who struggle so little in self-defence against that which surrounds them, that they may

be considered almost indifferent to its existence, or almost acclimated to endure its continuance. It is too true that, among these classes, there are swarms of men and women, who have yet to learn that human beings should dwell differently from cattle; swarms, to whom personal cleanliness is utterly unknown; swarms, by whom delicacy and decency in their social relations are quite unconceived. Men and women, boys and girls, in scores of each, using jointly one single, common privy; grown persons of both sexes sleeping in common with their married parents; a woman suffering travail in the midst of the males and females of three several families of fellow-lodgers in a single room; an adult son sharing his mother's bed during her confinement;—such are instances recently within my knowledge (and I might easily adduce others) of the degree and of the manner in which a people may relapse into the habits of savage life, when their domestic condition is neglected, and when they are suffered to habituate themselves to the uttermost depths of physical obscenity and degradation.

Here again, as in an earlier part of my Report, I think it requisite to remark, that I do not mean in any degree to suggest that the evils adverted to present themselves within the City to a greater extent than in sundry other parts of the metropolis. My sphere of duty lies within the City boundary, and it would be an impertinence in me to comment,

either favourably or unfavourably, on districts which lie within another jurisdiction than that of the Commission which I have the honour to address. Simply, to guard myself against the possibility of being misunderstood, I again draw attention to the fact that I studiously refrain from instituting comparisons with other metropolitan localities. Let me likewise observe that I am far from insinuating, or suspecting, that a majority of the poorer population of the City has fallen to that extreme debasement which I have just illustrated as affecting some portion (perhaps not an inconsiderable portion) of the poorest ; but I dare not suppress my knowledge that such instances exist, nor can I refrain from stating my belief, that ignorance and poverty will soon contribute to increase them, if sanitary and social improvement do not co-operate against their continuance.

Contemplating such cases, I feel the deepest conviction that no sanitary system can be adequate to the requirements of the time, or can cure those radical evils which infest the under-framework of society, unless the importance be distinctly recognized, and the duty manfully undertaken, of improving the social condition of the poor.

Those who suffer under the calamitous sanitary conditions which I have disclosed, have been led, perhaps, to consider them as inseparable from poverty ; and after their long habituation to such influences, who can wonder if personal and moral

degradation conform them more and more to the physical debasement of their abode? In the midst of inevitable domestic filth, who can wonder that personal cleanliness should be neglected? In an atmosphere which forbids the breath to be drawn freely, which maintains habitual ill health, which depresses all the natural spring and buoyancy of life, who can wonder that frequent recourse should be had to stimulants, which, however pernicious in themselves, still for a moment dispel the malarious languor of the place, give temporary vigour to the brain, and cheer the flagging pulses of a poisoned circulation? Who can wonder that habits of improvidence and recklessness should arise in a population, which not only has much ignorance and prejudice amongst it, but which likewise is often unaccustomed to consideration and kindness? Who can wonder that the laws of society should at times be forgotten by those whom the eye of society habitually overlooks, and whom the heart of society often appears to discard?

I believe that now there is a very growing feeling abroad, that the poor of a Christian country can no longer, in their own ignorance and helplessness, be suffered to encounter all the chances which accompany destitution, and which link it often indissolubly to recklessness, profligacy, and perdition. The task of interfering in behalf of these classes, however insensible they may be of their own danger and frequent degradation, begins

at length to be recognised as an obligation of society; and as such an interference may be fraught with the utmost advantage to sanitary progress, I shall now proceed to point out the manner in which, with this view only, it may most usefully and most humanely be made.

First of all I would point out to you, that within your Act of Parliament there are contained some enactments on this subject, which might be of great value, were it not for their very limited application:—‘Whereas the owners and keepers of lodging-houses of an inferior description, for the accommodation of mendicants, strangers, and other persons for the night, or other short periods, allow the same to be crowded, by receiving more lodgers than such lodging-houses are adapted to contain with a due regard to health,’ therefore, and for some other reasons enumerated in the 91st clause, it is enacted that you may require the registration, and may order the periodical inspection of such houses; that you may from time to time fix and determine the number of lodgers who may be accommodated in each lodging-house; that you may issue ‘rules or instructions regarding health, cleanliness, and ventilation;’ that you may ‘order that a ticket, containing the number of lodgers for which the house is registered,’ together with your rules and regulations, ‘shall be hung up, or placed in a conspicuous part of each room into which lodgers are received;’ and finally, ‘that if any

keeper of such lodging-house shall offend against any of these provisions, he shall be liable for each such offence to a penalty not exceeding 5*l.*, and the like penalty for every day after the first upon which any such offence shall be continued.' The spirit of these enactments is excellent; but unhappily the definition given at the end of the clause excludes from the operation of the law those very cases which most need to fall within it. 'Common lodging-house' (it runs) 'shall, for the purposes of this act, mean any public lodging-house, not being a licensed victualling-house, in which persons are harboured or lodged for hire, for a single night, or for less than a week at one time, or in which any room is let for hire to be occupied by more than one family at one time.' Lodging-houses, according to this definition, are (I am informed) hardly to be found within the City of London; and the clause has remained, and seems in its present form likely to remain, quite inoperative. If, in any future renewal or amendment of your Act, the definition could be modified in such a manner, that the powers given in respect of lodging-houses should be extended to all the poorer tenements of the City, where the several floors are let separately at a weekly rent, the clause in question would be rendered one of the most serviceable in the Act, and one of the most general application. In its present form, the clause barely enables you to deal with the temporary bed-accommodation of trampers

and vagrants,—a class happily not very numerous in the City; while, modified in the manner I suggest, it would put under your sanitary regulation the whole household economy of the permanent industrial population of the City; and, if effectively worked, would conduce beyond all estimation to the physical, social and moral improvement of that class.

Secondly, Gentlemen, and as a matter of even higher importance, I would beg you to consider the incalculable good which may be conferred on the poorer classes of society, by the direct educational influence of those in better and more enlightened circumstances than their own. When I say that all the social errors to which I now more particularly refer, would gradually but swiftly vanish under the influence of education, I do not mean that the cure would lie in learning to read and to write and to sum;—though these attainments, of course, would largely increase the power, usefulness, and market-value of their possessor. The education to which I refer, as an all-important influence for sanitary progress, is that which would consist in exhibiting to the lowest classes of society frequent practical evidences of the attainability and the advantages of higher civilization; an education, which by model and examples would lead them to know cleanliness from dirt, decency from grossness, human propriety from brutish self-abandon-

ment; an education which, by sensible experience, would teach them to feel the comfort and the profit of sanitary observances, and would apply their instinct of self-preservation to the deliberate avoidance of disease.

It is in this point of view, Gentlemen, that I would solicit your attention to the useful and philanthropic exertions of three societies which have been established in the last few years, with the object of improving the condition of the labouring classes, and I would venture to suggest that the course, which those societies have adopted in various parts of the metropolis, is one that might with the utmost advantage be pursued within the City of London.

The establishment of *Model Dwelling* and *Lodging-houses*, and of *Public Baths* and *Laundries*, for the use of the labouring population, is now no longer a matter of recent speculation. Under the beneficent auspices of the Societies to which I have referred, the following experiments have been tried:—

The Committee for promoting the establishment of Baths and Wash-houses, having Mr. W. Cotton first, and then Sir H. Dukinfield, for its Chairman, and including in its number, with other influential persons, several members of this Corporation, founded at great pains and expense a model institution at Goulston-square, Whitechapel. In spite of many circumstances conspiring to render this first and ex-

perimental establishment particularly expensive, it has more than supported itself by the small payments of the poor; and its arrangements are sufficiently extensive for it to have given in one day as many as 932 baths. This fact, having occurred in the first year of its establishment, shows how much the poor must have appreciated the additional comfort placed within their reach; and I may add that, from the first opening of the building, the annual receipts have been progressively on the increase. Somewhat earlier, and under the influence of the same parent-committee, though specially directed by a branch-committee, a similar establishment was founded in George street, Euston square. During the year 1848 the number of payments made here for bathing was 111,788; the number of payments for washing in the laundries, 246,760. This establishment has not only proved self-supporting, but has been enabled to accumulate a large surplus, which is now being applied to enlarge and improve the building. At Glasshouse Yard, near the entrance to the London Docks, there has been founded, on the same model, a small establishment of free baths and washhouses for the destitute poor. It was opened in May, 1845. In the first year the baths given amounted to 27,662; the usings of the laundry to 35,840; and its total working expenses were covered by £378.

No language, however eloquent—no comment, however instructive, could equal the significance of

the figures which I have cited as illustrating the great utility of these institutions ; and, as regards their pecuniary success, it is impossible to furnish you with better testimony than is comprised in the fact, that the Guardians of the Poor in a great metropolitan parish* have recently, out of the poor-rates, founded an institution of this nature. They have become witnesses to the financial economy of that sanitary and social boon. In their establishment, which is not only self-supporting but amply remunerative, the poor are enabled to have baths at an expense of a penny for a cold-bath, and twopence for a warm-bath ; and the women are enabled to do their washing, ironing, and drying, with an unlimited water supply, and with other arrangements of most admirable completeness, at an expense of only twopence for the first two hours during which they occupy the separate chambers allotted to them. A very considerable proportion of the expense is covered by the receipts for baths given at the higher price of sixpence, and with some additional luxuries, to persons of a higher grade in society than those who use the ordinary baths ; the former, though used by a different class of persons, being sought with almost as much avidity as the latter.

In the sanitary point of view, I probably need not insist much on the advantages which these establishments have conferred. You will hardly

* St. Martin's in the Fields.

doubt, how good and wholesome a thing it has been, for so many thousands to have had the means of cleansing their bodies and their clothing, who, in the absence of such facilities, must often have carried about their persons a long and offensive accumulation of dirt and sweat.

Next, very briefly, let me allude to what has been done in respect of the habitations of the poor; first, by the Society for the Improvement of the Condition of the Labouring Classes, under the patronage of Their Majesties the Queen, and the Queen Dowager, with the Prince Albert for its President, and Lord Ashley for its Chairman; secondly, by the Metropolitan Association for Improving the Dwellings of the Industrious Classes, under the chairmanship of Sir Ralph Howard, and with a committee which, like that of the former society, includes many of the best and wisest, as well as the highest persons of the country. Under the influence of these societies the following experiments have been made:—

In the Old Pancras-road a very large building has been erected, to accommodate 110 families separately and distinctly, in sets of two and three rooms each. Each set of rooms has its own boiler, range, oven, and coalbox; has a separate scullery, in which are sink, cistern, and dust-shaft; has its own watercloset, its own ample supply of water, and many other conveniences. The rents vary

from 3*s.* 6*d.* to 5*s.* per week for a set of two rooms; and from 4*s.* 9*d.* to 6*s.* 3*d.* for a set of three rooms. The founders of this establishment have recently purchased land at the end of Spicer-street, Spital-fields, on which to erect a lodging-house for 300 single men, and also houses for families.

In the Lower-road, Pentonville, houses of three different classes have been built, on the same general principle of furnishing every convenience and sanitary requisite. They accommodate, on the whole, 23 families and 30 single women—widows, or of advanced age. The entire houses for families, with all the above-mentioned conveniences, are at a rent of 6*s.*, having a good-sized living-room, two bed-rooms, with additional enclosed recesses for children's beds, a yard at the back of the house, and the joint use of a wash-house and drying-yard. A floor of two rooms is rented at 3*s.* 6*d.*, and a single room by a single person at 1*s.* 6*d.*

In George-street, St. Giles's, a model lodging-house has been established, affording accommodation to 104 single men, and combining everything essential to such an establishment. The ventilation and drainage have been carefully attended to; an ample supply of water is provided, gas extends through the house, the dormitories are arranged so as to keep their inmates private from each other; there are washing-closets fitted up with every requisite for cleanliness; there is a bath-room supplied with hot and cold water; there are a kitchen

and washhouse furnished with all appropriate utensils, a pantry-hatch, with separate, ventilated, and secure compartments for the food of each inmate ; in the pay-office is a small well-selected library, for the service of the lodgers, and the use of a spacious coffee-room is likewise for their common convenience. Their pay is 4*d.* per night, or 2*s.* a week—an amount below the ordinary rent paid for the most miserable accommodation in a trampers' lodging-house.

At 76, Hatton-garden, a lodging-house for 57 single women has recently been opened, consisting of three floors of dormitories, divided into separate compartments, and a basement fitted up with kitchen, washhouse, bath, pantry, safes, &c.

In Charles-street, Drury-lane, three tenements, originally separate, have been converted into a single lodging-house for 82 single men, on the same general plan and at the same rent as that in George-street, St. Giles's.

All the lodging-houses are furnished, and the inmates are supplied with utensils for their food and other purposes, which must be returned, or made good at their leaving.

In all these lodging-houses rules exist for the purpose of insuring cleanliness, sobriety, carefulness, and general propriety of conduct, any infraction of which subjects the offender to immediate expulsion. For the sake of those who choose to avail themselves of the opportunity, Scripture read-

ings are appointed to take place in the common room every evening at 9 o'clock ; and copies of the Scriptures, with other well-chosen books, are left in charge of the superintendent for distribution among the lodgers, in the hope that they may thus be induced to occupy their leisure to advantage.

In the construction of all these establishments, equally, the greatest pains have been taken to bring sanitary science to bear on the comfort, and convenience, and health of the inmates. Ventilation, drainage, facilities for decency and for cleanliness, have in every instance been made the leading considerations of the architect.

In regard of these model houses and model lodgings, it would, I think, be a great error to estimate their benefit as merely relative to the number of persons at any one time inmates of them. No doubt it is a great advantage that they furnish, at the ordinary prices of the day, or at a still lower price, so excellent accommodation to several hundreds of persons ; and it is a still greater good, (particularly in regard of those established for single men and single women), that they drill their inmates into decent and orderly habits, and accustom them to a high standard of household accommodation, which will probably influence their subsequent married lives in the same desirable direction. But, indirectly, their utility has a far wider scope. They stand in bright

contrast to the dark features of filth and unwholesomeness which environ them; they familiarize the poorest classes generally with all the practical advantages of cleanliness; they show that dirt is not inevitable; they therefore create and foster, among the humblest members of society, a laudable discontent with defective sanitary arrangements, and they establish a strong public opinion, grounded on experience, in favour of those conditions of cleanliness and comfort, which determine the maintenance of health.

That all the great results of sanitary science can be applied in their utmost perfectness to the dwellings of the poor, for the payment of a rent often below, and never above, the average given for some miserable doghole, that poisons its inhabitants, is a truth of immense importance, deserving the widest dissemination, and pregnant with the most hopeful promise. Such advantages spring from and illustrate the economical application of the associative principle; they cannot be obtained otherwise than by the application of capital in such an amount as lies only within the compass of wealthy corporations, or is reached by the voluntary combination of several private purses. While the labouring classes are abundantly able to maintain these institutions when established, and to render them amply remunerative to those whose capital has first founded them, it is obvious that no

power of association lying within their means can suffice to originate such work.

This task of initiation rests with others. And therefore it is, Gentlemen, that on this occasion I have been induced to bring under your notice, as a most important part of my subject, the outline of what has been done in the matter of Model Dwellings and Public Baths and Washhouses. Feeling assured that establishments of this nature are of infinite utility in the several respects I have enumerated; feeling assured that, beyond their immediate operation on the health of inmates and users, they also tend, by their indirect educational influence, to improve the social habits, to promote the civilization, to elevate the general tone and character of the labouring classes, I earnestly recommend them to your attention; hoping that you may either yourselves confer on the poor population of the City the advantage of your patronage and succour in this respect, or else may transfer the matter to the jurisdiction of the Common Council, with all the influence and authority in its favour which your recommendation would insure.

SUGGESTIONS FOR SANITARY ORGANIZATION IN THE CITY.

Having now enumerated the sanitary evils of the City, and the remedies which appear to my mind most appropriate for their removal, it becomes desirable that, in concluding, I should point out to you the organization which seems necessary to be adopted during the gradual transition of the City from its present to a healthier state ;—an organization, which may render this transitional period as short as possible, and may most effectually contribute to mitigate, for the time, the pressure of such evils as cannot immediately be removed.

The object of this organization lies in a word ;—Inspection, Gentlemen ; inspection of the most constant, most searching, most intelligent, and most trustworthy kind, is that in which the provisional management of our sanitary affairs must essentially consist.

I presume I may take for granted that, in some form or other, a *Committee of Health* will exist, either as a Committee of the Court of Common Council, or as one of this Honourable Court.

I may, perhaps, further assume that such a Committee will have authority to entertain *all subjects* relative to the sanitary improvement of the City, and to make thereon such recommendations as shall seem fit to them; and, further, that they will make it their business to receive *periodical intelligence*, as complete as possible, on all variations in the public health, and on all circumstances likely to affect it.

In order that any Committee, acting for sanitary purposes within the City, shall have a reasonable chance of success in its endeavours for the public good, the following means of information will be necessary for its use:—

1. That an account should be kept, corrected year by year, of every house within the City; as to the area of building, the number of floors, rooms, and windows; as to its ventilation; as to its drainage, water-supply, and other facilities for cleanliness; as to its method of occupation, and number of inhabitants.

2. That from this account there should be made out, at least twice yearly, a list of houses and streets remaining in an objectionable sanitary state; and a list, also, of such as may have been remedied to the satisfaction of the Committee since the formation of their last preceding list.

3. That, while trades injurious to health or offensive to their neighbourhood are suffered to continue within the City, there should be given periodical reports on the condition of such establishments, to the end that they may be-maintained so as to be least detrimental to the public health.

4. That a record of every death registered as occurring in the population of the City should lie before the Committee; and

5. I consider it quite indispensable, that they should likewise receive the largest and most accurate returns which can be procured of all sickness occurring among the poorer classes; and (particularly in respect of all epidemic, endemic, and infectious disorders) that the medical practitioner who communicates the fact of illness, should likewise report the existence of any local causes, or other influences of general operation, which have tended to produce, or are tending to continue, such illness.

On the subject of returns of the nature last referred to, I have already, on various occasions, submitted my opinion to the judgment of your Honourable Court. A year ago, in the first Report which I had the honour to make here, and in various discussions which during some months followed the reception of that Report, I stated how

necessary I deemed such returns, for the purpose of guiding and justifying the various recommendations which it would become my duty to lay before you. The period which has since elapsed, including its three months of pestilence, has furnished me with the strongest confirmation of those views. As I formerly stated by anticipation, so now I repeat from experience, that nothing deserving the name of sanitary administration can exist in the City, without accurate periodical intelligence of all such sickness (at least) as comes under parochial treatment, or without such reports on the local sanitary conditions and on other causes of disease, as were desired to accompany that intelligence.

When the matter was previously under your consideration, it was argued that the reception of such intelligence formed no part of your functions as a Commission for draining, lighting, paving, and cleansing the City of London; that all sanitary matters, beyond these and the like, were foreign to your proper sphere of operation; and that your funds, raised by rates from the citizens of London, could not with propriety be applied to meet the expenses of such an arrangement. On this question of jurisdiction and finance I shall, of course, hazard no opinion. I would simply beg to repeat, with regard to so much of the matter as lies within my own professional province, that the intelligence in question is absolutely necessary for the present progress of sanitary measures within the City;

that no Health-Committee can exist for a month without it; nor can any officer, having proper respect for his character, consent to be considered responsible for the health of a population, whose illnesses he learns only from their posthumous record in the death-register.

During the recent prevalence of cholera, the Health-Committee of the Common Council complied for the time with my recommendation, and established a system of daily reports, rendered still more serviceable by free personal intercourse between myself and the several gentlemen having medical charge of the three City unions. What needed to be daily during a period of pestilence, might fitly become a weekly communication at all other times. I have already reported to the Health-Committee, and I beg to reiterate here, that the advantages derived from that system of communication were such as could have been attained in no other way.

I may remind you that each of the gentlemen referred to, serving under the Poor Law, works within a certain small and definite district; that he is therefore peculiarly competent to speak on the state of the population in that district, on their habits and necessities, on their customary condition of health, and on their liability to epidemic disease; and that the total staff of these officers, taken collectively, representing the medical practice of the whole city, can supply exactly that

kind of detailed and precise information which is most serviceable to your Officer of Health, in guiding him to those more general and comprehensive conclusions which it is his business to lay before you. These gentlemen are the habitual medical attendants of the poorer classes; day by day, in the unobtrusive beneficence of their calling, they pass from house to house, and from court to court—the constant recipients of complaint, or the constant observers of ground of complaint—amid all that destitute population on whose condition you require to be informed. They are in the constant presence of the pestilences which reign in our worst localities; they are the chief treaters of endemic disease within the City—of that disease which, by its proportion, measures the success of sanitary changes, or indicates their failure; and it has been the professional education of these gentlemen, as it is their business, to trace such effects to their causes. Their reports would be the authenticated statements of experienced medical practitioners, familiarly conversant with their several respective localities.

If it were your wish and object, with utter indifference to expense, to organize the best scheme for laying before yourselves from time to time a succession of accurate and trustworthy reports on the state of health, and condition of dwellings, in the several districts of the City;—if you were willing to engage a large number of non-medical per-

sons, who should give their whole time to the duty of exploring and reporting on that state, I am persuaded that this expensive and cumbrous proceeding would have a smaller measure of success than that which I submit to you, and which consists essentially in availing yourselves of the local knowledge and daily observations of a staff of officers, already organized and in active occupation for the very purposes in question.

That such intelligence, embracing weekly returns from the eleven parochial surgeons of the City of London, and including their comments on the local causes of prevailing disease, will involve an annual expenditure of money,*—and that this expenditure, sooner or later, and in some form or other, will be derived from the rate-paying portion of the community, are facts which cannot be doubted. But that the expenditure will be a judicious one; that it is indispensable to the effective working of any Health-Committee, or any Health-Officer within the City; that it will be the first step to the mitigation of the disorders reported on; that it will disclose evils which else would escape recognition and remedy; that in a few years it will have rendered a general mortality of 3 per cent. on the entire population of the City a matter of history and a warning, instead of its being, as now, a present and

* When the matter was formerly under consideration of the Commissioners, it appeared that the expense of such an arrangement would be about £500 annually.

awful reality ; that in lessening sickness and death, it will have stayed a large source of pauperism, will have diminished the number of occasional and habitual claimants of Union relief, and will have become a measure of real and considerable economy;—these are points on which, with the utmost sense of official responsibility, I beg to record my deliberate conviction.

Accordingly, I have to recommend that any Committee which may undertake the administration of sanitary affairs for the City, shall be furnished as completely as possible with information of the nature I have specified.

Another element to which I think it necessary to advert, in connexion with a future sanitary organization for the City, is this,—that some permanent arrangement should be made, by which the maintenance of exterior and interior cleanliness, the enforcement of scavengers' duties, the suppression of nuisances, and the like, should be brought under habitual and systematic surveillance ; one, by which all breaches of your present or future sanitary regulations may be quickly detected, and may be visited with their appropriate penalties as speedily and as certainly as possible. I am induced the rather to bring this subject before you, as complaints of scavengers' duties being neglected have reached me at every turn. I am informed that it is usual for them to refuse to remove dirt and

rubbish from houses, according to the terms of their contract, except on the tenant's payment of an additional gratuity; and it must be obvious to your Honourable Court that the arrangements which you have made by contract for this purpose are virtually defeated as regards the poorer population, when the removal of refuse-matter is made contingent on the gift of beer-money by those whose means are so restricted.

It is in respect of matters of this sort, and of such only, that I think the services of the Police-Force might usefully be employed. Their want of special education, and their employment in other duties, are circumstances which appear to me quite conclusive for objecting to their utilization as sanitary reporters. But while I entertain the opinion that their employment in the latter direction would be both fruitless and inconvenient, I would submit that their numbers and their diffusion through the City qualify them well to act against all causers of nuisance, as they act against other offenders, both detectively and preventively; and I would venture to repeat a suggestion, which I made in January last, 'that the police should consider it part of their duty, to report on every nuisance within their knowledge, and on every infraction of such sanitary rules as this court may establish.'

Here, Gentlemen, terminates the list of subjects which, on this occasion, I have thought it my duty to bring before you. Long as the enumeration may have appeared, I can assure you that my present Report bears a very small proportion, in point of dimensions, to the very large and very various mass of materials on which it is founded. In compressing it within the narrowest limits consistent with intelligibility, and in excluding from it nearly all details on the matters treated of, I have consulted the convenience of your Honourable Court, notwithstanding the greater labour and difficulty of execution which belong to the plan I have adopted. At any time, in Court or in Committee, when you may wish to pursue the subject, I shall be ready to enter at far greater length, and with more elaborate minuteness, on any of those subjects which, at the present opportunity, I have only sketched for your general information.

In the matters which I have enumerated, some lie distinctly *within* your province, as assigned by the Act of Parliament; while others may be thought to lie, just as distinctly, *without* that province. In affairs strictly under your jurisdiction, and within the present scope of the law, there remains very much to achieve. The complete enforcement of house-drainage, till every house washes itself into the sewer; the more general distribution of water, till every individual within the City has an abun-

dant supply within his immediate reach ; the effective preservation of public cleanliness ; the construction and maintenance of sewerage, paving, lighting, for all the streets, courts and passages of this great City ;—these constitute an immense amount of responsibility and labour. Those other objects to which I have referred, are partly such as cannot be accomplished without the further interference of the Legislature. It is a point solely for the discretion of your Honourable Court to determine, how far you may be willing to enlarge the sphere of your sanitary operations, and to undertake the difficulties of a new campaign.

To your Officer of Health the Act of Parliament allows no such option. ‘Whereas the health of the population, especially of the poorer classes, is frequently injured by the prevalence of epidemical and other disorders,’ therefore it is appointed for *his* duty, that he shall report on whatsoever ‘injurious affects the health of the inhabitants of the City,’ and that he shall ‘point out the most efficacious mode of checking or preventing the spread of contagious or other epidemic disease.’ Actuated by obligation of the duty thus expressed in your Act of Parliament, after full reflection on all that those expressions imply, and with the deepest sense of the responsibility belonging to one who is honoured with the task of advising the first Corporation of the country in

respect of its sanitary proceedings, I have been compelled, in the course of my present Report, to trench upon many subjects which do not customarily fall under your consideration, and which (as I have stated) may by some be considered as utterly foreign to your jurisdiction and province.

It rests with your Honourable Court to determine what course you will adopt in respect of such departments of the great sanitary scheme;—whether you will retain them under your consideration, and will assume the responsibility of dealing with them in proportion to their magnitude and importance, or will transfer them to the Court of Common Council for the less restricted deliberation of that body.

Let me once more declare my profound conviction of their importance to the health and welfare of the City.

To provide an inoffensive outfall for the sewerage of our vast population; to render the river a source of unqualified advantage; to give an indefinite extension and a sounder principle to the system of water-supply; to suppress all trades and occupations which taint the atmosphere with materials of organic decomposition; to abate the nuisance of smoke; to provide the facilities for extramural interment, and to procure the prohibition of all further burial amidst our living; to improve the domestic arrangements of the poor, and to insure for them an adequate supervision; to

hinder the occupation of houses which breed pestilence; to destroy such as are irremediably hostile to health, and to disperse the stifled population of courts and alleys; to establish public baths and laundries which may offer to the poor the utmost facilities and inducement for the maintenance of personal cleanliness; in the stead of such courts as we may hope to depopulate and destroy, but in open streets and with perfect ventilation, to erect and to place at the disposal of the labouring classes, houses and lodgings, which not only may offer to their inhabitants every convenience essential to health, and decency, and comfort, but may likewise serve as models of household economy for the whole district in which they stand;—these, Gentlemen, are the heads, briefly recapitulated, under which I have been obliged, as it were casually in my Report, to touch on many subjects perhaps foreign to your jurisdiction, but lying at least on the confines of your province, and which it now remains with you either to retain or to transfer.

That the subject of sanitary improvement in its widest scope, and with all that even incidentally relates to it, is one which, according to the ancient constitution of the City, rightfully belongs to the authorities of the Corporation, in some one or other of their municipal relations—that it belongs to them equally as their privilege and their duty, cannot for a moment be questioned. And if your

Honourable Court should determine on a negative opinion as regards yourselves, and should decide on transferring these matters to the Common Council, I venture to hope that your influence may accompany them in their course, and may procure for them the consideration they deserve.

Gentlemen, the history of the City of London is full of great examples of public service. It records many a generous struggle for the Country and for the Constitution; it records a noble patronage of arts and letters; it records imperial magnificence and Christian liberality; but never, within the scope of its annals, has the Corporation had so grand an opportunity as now for the achievement of an unlimited good. Because of the City's illustrious history, and because of the vast wealth and power which have enabled it so often to undertake the largest measures of public utility and patriotism,—therefore it is, that *now* the expectations of the country may well be fixed on the City of London in regard of this, the distinguishing movement of modern times—the movement to improve the social condition, and to prolong the lives of the poor. Those who are familiar with the many abiding monuments of your civic munificence and grandeur, may well expect that, in approaching this all-important question, the counsels of the City will be swayed by high and generous considerations.

In the great objects which sanitary science

proposes to itself,—in the immense amelioration which it proffers to the physical, social, and (indirectly) to the moral condition of an immense majority of our fellow-creatures, it transcends the importance of all other sciences, and in its beneficent operation seems most nearly to embody the spirit and to fulfil the intentions of practical Christianity.

Ignorant men may sneer at its pretensions; weak and timorous men may hesitate to commit themselves to its principles, so large in their application; selfish men may shrink from the labour of change, which its recognition must entail; wicked men may turn indifferently from considering that which concerns the health and happiness of millions of their fellow-creatures. To such men an appeal would indeed be useless. But, to the Corporation of the City of London (whether as assembled in its entire Parliament, or as represented within the confines of this Court)—to the Corporation which, on so many occasions, has attained patriotic ends by great expenditure and sacrifice; to men earnest, strong-minded, and practical, having much consideration for their fellow-creatures, and having little consideration for personal toil or municipal expense, so only that they may fulfil a great Christian duty, and may confirm the gratitude with which history records their frequent services to humanity;—to such a Corporation, and to such men, the Country looks for the perfection of a

sanitary scheme which shall serve as model and example to other municipal bodies undertaking the same responsibility; and to such a Corporation and to such men do I, likewise, your Officer of Health, respectfully and confidently address a well-founded appeal.

I have the honour to be,

GENTLEMEN,

Your faithful and obedient, humble Servant,

JOHN SIMON.

The following are the Tables referred to in the preceding Report, pp. 8 & 9 :—

TABLE I.

POPULATION, NUMBER OF DEATHS, AND RATE OF MORTALITY, IN THE CITY OF LONDON, FOR THE YEAR 1848-9.

A. Population, including that of Workhouses, estimated (in Unions and Sub-Districts) as follows,—viz..

East London Union, 39,741.			West London Union, 28,939.		
St. Botolph.	Cripplegate.	Workhouse.	South.	North.	Workhouse.
20,395	19,346	*	16,696	12,243	*

City of London Union,
56,745.

N. E.	N. W.	S. W.	South.	S. E.	Workhouse.
12,282	12,610	8,969	12,131	10,753	*

Total 125,425.

B. SUMMARY OF DEATHS.

Cases with uncertain address	14
East London Union	1,263
West London Union	1,133
City of London Union	1,389
Total...	3,799

TABLE II.

COMPARATIVE VIEW OF MORTALITY DURING THE LAST
QUARTER, TERMINATING SEPTEMBER 29.

Total number of Deaths, 1396.

In the following Table the several Sub-Districts are arranged according to the Registrar-General's estimate of their ordinary mortality per thousand of the population. His estimate is shown in the first column of figures (A), where it has been reduced to an average rate per quarter for the sake of comparison with the second column (B). The latter gives the several rates of mortality per thousand during the last quarter, and shows in what degree they were accelerated by epidemic causes.

	A.	B.
City of London Union, North-West Sub-District	4.75	5.70
City of London Union, South-East Sub-District	5.25	7.38
City of London Union, South Sub-District	6.00	7.40
City of London Union, North-East Sub-District	6.00	6.17
City of London Union, South-West Sub-District	6.50	17.59
West London Union, North Sub-District	6.75	13.80
West London Union, South Sub-District	6.75	18.68
East London Union, St. Botolph Sub-District...	6.75	10.24
East London Union, Cripplegate Sub-District...	7.75	11.94
City of London, in aggregate	6.07	11.13
Minimum Suburban Rate.....	2.75	2.75

* In making the calculations on which these Tables are founded, I have reckoned the Workhouse-Population and Workhouse-Deaths of each Union as forming part of the aggregate-population and aggregate-mortality for such Union respectively; and in proceeding to calculate the District-Mortality, I have distributed among the several Districts the population and the mortality of their Union Workhouses, apportioning these in the ratio of the District-Population, so as to prevent the high Workhouse-Mortality from telling unjustly against the District in which the building happens to be situated.

Hospital deaths have been distributed according to the residences of the patients, so that the North Division of the West London Union (in which St. Bartholomew's Hospital is situated) now retains only its just proportion of deaths.